CLAIMS

[Claim 1]

An antioxidant oil and fat composition with a water content of 0.5 to 18 wt% comprising

an aqueous phase containing a water-soluble antioxidant in an amount of 2.5 to 65 wt%, and further containing a carbohydrate in an amount such that the aqueous phase has a total water-soluble solids content of 18 to 79 wt%,

wherein the amount of the aqueous phase in the antioxidant oil and fat composition is within a range of 1 to 38 wt%, and the aqueous phase with a particle size of 300 nm or less is dispersed in an oil phase, and

wherein the oil phase contains PUFA oil and/or fish oil.

[Claim 2]

The antioxidant oil and fat composition according to claim 1,

wherein the oil phase contains at least one oil-soluble emulsifier selected from polyglycerol condensed ricinoleates, sugar esters, glycerol fatty acid esters, or lecithins, in an amount that is 0.7 to 9 times the weight amount of the water.

[Claim 3]

The antioxidant oil and fat composition according to claim 1,

wherein the water-soluble antioxidant is at least one member selected from vitamin C, an amino acid, or catechin.

[Claim 4]

The antioxidant oil and fat composition according to claim 2,

wherein the water-soluble antioxidant is at least one member selected from vitamin C, an amino acid, or catechin.

[Claim 5]

The antioxidant oil and fat composition according to claim 3,

wherein the amino acid is at least one member selected from glycine, glutamic acid, alanine, proline, lysine, tryptophan, methionine, valine, serine, histidine, isoleucine, leucine, phenylalanine, arginine, threonine, cysteine, aspartic acid, glutamine, or asparagine.

[Claim 6]

The antioxidant oil and fat composition according to claim 4,

wherein the amino acid is at least one member selected from glycine, glutamic acid, alanine, proline, lysine, tryptophan, methionine, valine, serine, histidine, isoleucine, leucine, phenylalanine, arginine, threonine, cysteine, aspartic acid, glutamine, or asparagine.

[Claim 7]

The antioxidant oil and fat composition according to claim 6,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 8]

The antioxidant oil and fat composition according to any one of claims 1 to 5,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 9]

A method for producing an antioxidant oil and fat composition, the method comprising the following steps of:

1: preparing an aqueous phase containing a water-soluble antioxidant in an amount of 2.5 to 65 wt%, and further containing a carbohydrate in an amount such that the aqueous phase has a total water-soluble solids content of 18 to 79 wt%; and

2: dispersing the aqueous phase in an oil phase such that the percentage of the aqueous phase becomes 1 to 38 wt% with a particle size of 300 nm or less to obtain an antioxidant oil and fat composition with a water content of 0.5 to 18 wt%,

wherein the oil phase contains PUFA oil and/or fish oil.

[Claim 10]

The production method according to claim 9,

the method comprising the step of adding, to the oil phase, at least one oil-soluble emulsifier selected from polyglycerol condensed ricinoleates, sugar esters, glycerol fatty acid esters, or lecithins, in an amount that is 0.7 to 9 times the weight amount of the water contained in the antioxidant oil and fat composition.

[Claim 11]

The production method according to claim 9,

wherein the water-soluble antioxidant is at least one member selected from vitamin C, an amino acid, or catechin.

[Claim 12]

The production method according to claim 10,

wherein the water-soluble antioxidant is at least one member selected from vitamin C, an amino acid, or catechin.

[Claim 13]

The production method according to claim 11,

wherein the amino acid is at least one member selected from glycine, glutamic acid, alanine, proline, lysine, tryptophan, methionine, valine, serine, histidine, isoleucine, leucine,

phenylalanine, arginine, threonine, cysteine, aspartic acid, glutamine, or asparagine.

[Claim 14]

The production method according to claim 12,

wherein the amino acid is at least one member selected from glycine, glutamic acid, alanine, proline, lysine, tryptophan, methionine, valine, serine, histidine, isoleucine, leucine, phenylalanine, arginine, threonine, cysteine, aspartic acid, glutamine, or asparagine.

[Claim 15]

The production method according to claim 9,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 16]

The production method according to claim 10,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 17]

The production method according to claim 11,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 18]

The production method according to claim 12,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 19]

The production method according to claim 13,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 20]

The production method according to claim 14,

wherein the carbohydrate is at least one member selected from sugar alcohols, glucose, sucrose, dextrins, maltose, or oligosaccharides.

[Claim 21]

A method for producing an antioxidant oil and fat composition,

the method comprising the step of dehydrating 12 to 76 wt% of water from the antioxidant oil and fat composition obtained by the production method of any one of claims 9 to 20 to obtain an antioxidant oil and fat composition with a water content of 0.5 to 18 wt%.

[Claim 22]

The antioxidant oil and fat composition according to any one of claims 1 to 8, wherein the antioxidant oil and fat composition is an unsaturated fatty acid-containing oil and fat composition.

[Claim 23]

The antioxidant oil and fat composition according to any one of claims 1 to 8 and 22, comprising DHA and EPA in a total amount of 0.1 to 60 wt%.